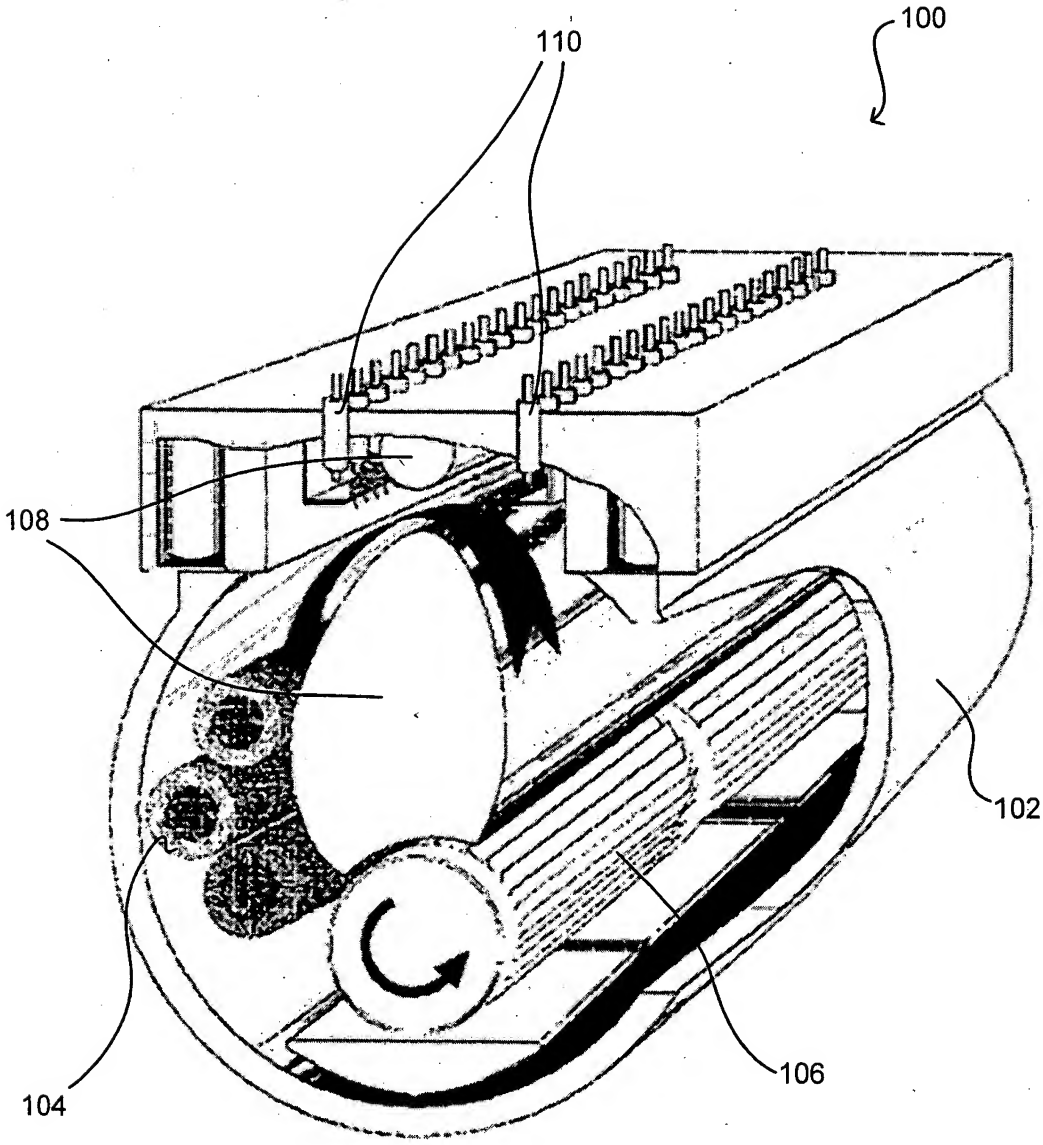
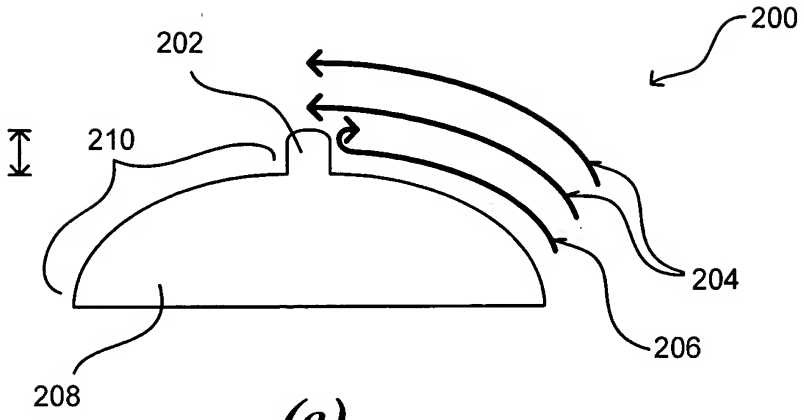
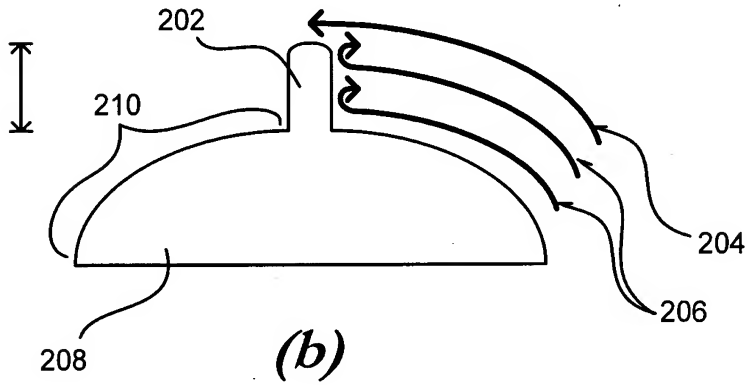


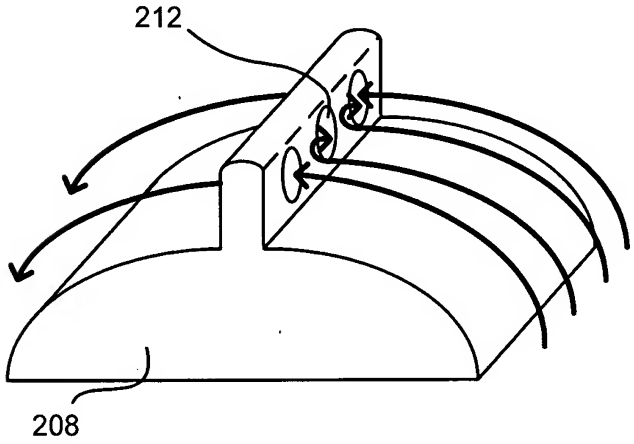

*Figure 1*




(a)




(b)




(c)

*Figure 2*

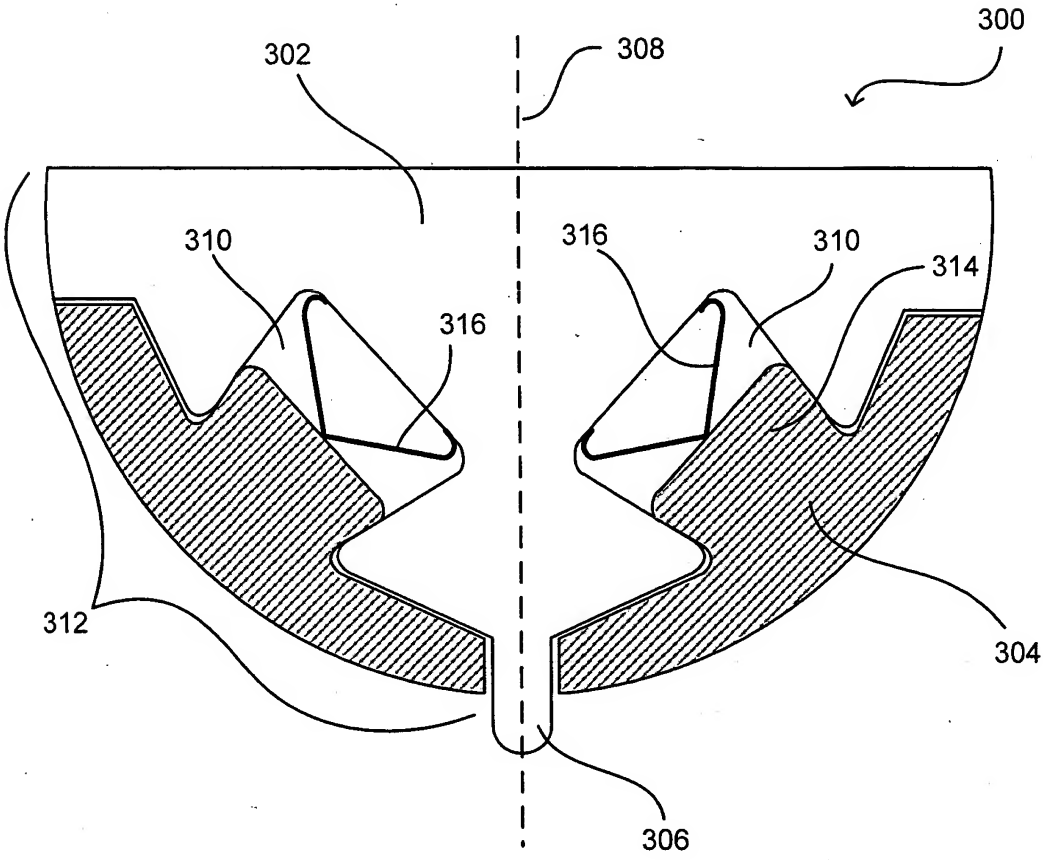
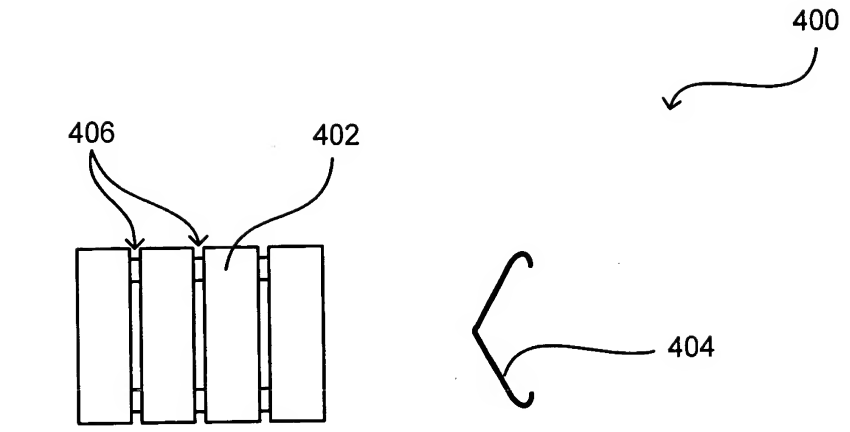
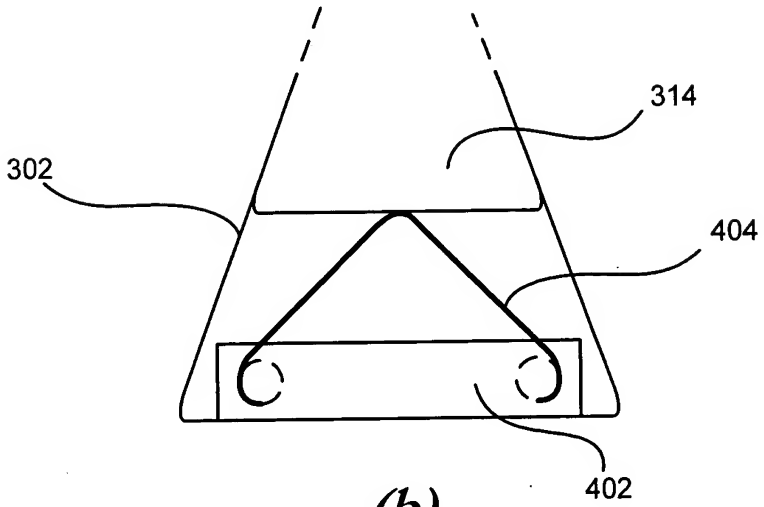



*Figure 3*




*(a)*




*(b)*

***Figure 4***

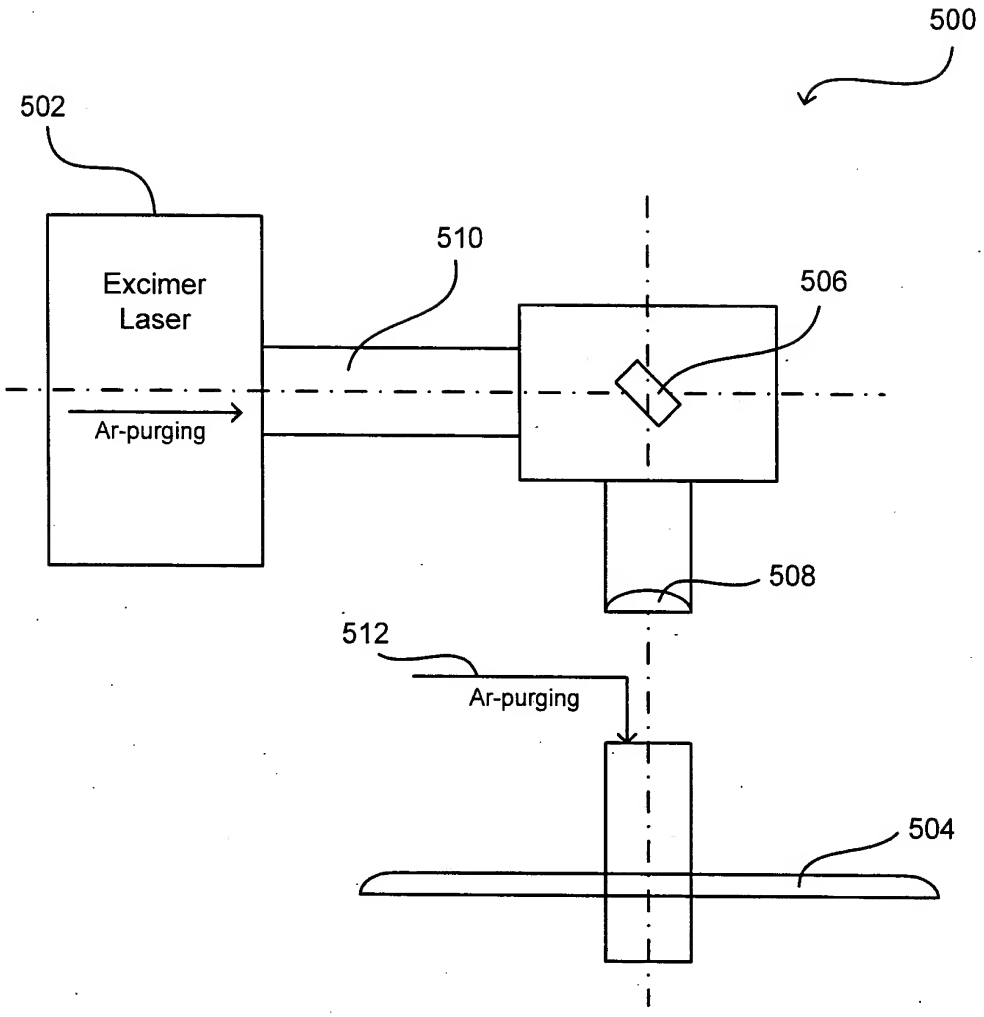

500
502
Excimer
Laser
510
506
Ar-purging
508
512
Ar-purging
504

*Figure 5*

*Table 1* (Data of Dicronite Dry Lube)

| SPECIFIC TECHNICAL DATA | |
|---|---|
| COMPOSITION | modified Tungsten Disulfide, lamellar form |
| HARDNESS | takes on the hardness of the substrate |
| MOLECULAR WEIGHT | 248.02 |
| DENSITY | 7.4 grms/cc |
| THICKNESS | 0.000020 inch |
| APPEARANCE | on initial application-silvergray, then polished rhodium when burnished |
| CO-EFFICIENT OF FRICTION | inclined plane technique-0.03 |
| CARRIER | dry air, no binders or adhesives |
| ADHESION | mechanical-molecular interlock |
| CURE TIME | no cure time required, applied at ambient temperature |
| TEMPERATURE RANGE | lubricates from -350 f to +1000 f (-188 c to 538 c) in normal atmosphere |
| CHEMICAL STABILITY | inert, non-toxic, corrosion resistant |
| CORROSION RESISTANCE | minor delay of corrosion, will not inhibit corrosion of substrate |
| MAGNETISM | non-magnetic |
| VACUUM ENVIRONMENT | 350 f to +2400 f (-188 c to +1316 c) in temperatures of 10-14 Torr |
| SUBSTRATE | all solid metals, glass, fiberglass, porcelain, most plastics, and man-made solids |
| LOAD CAPACITY | same as the substrate, to 350,000 PSI |
| LOX COMPATIBILITY | insensitive to detonation by or in the presence of oxygen |
| DEGRADATION | will not cause distortive stress relief, additional stress, or degradation to substrate |

***Figure 6***

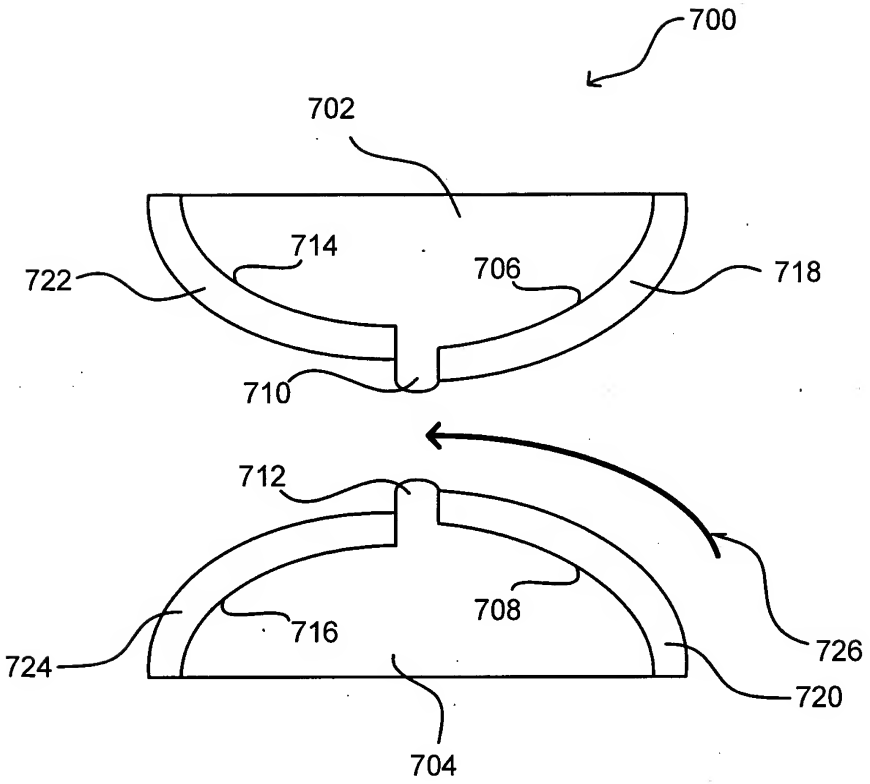



*Figure 7*